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## **Pointers**

**Kveim Test:** Dr. P. D'Arcy Hart and colleagues suggest that positive reactions in clinically normal subjects who have failed to convert to B.C.G. indicate not occult sarcoidosis but some novel immunological change due to the vaccination (p. 795). Leader discussing significance (p. 791).

**Human Growth Hormone:** Mr. W. M. Hunter and Dr. F. C. Greenwood report effects of tolbutamide, insulin, exercise, and oral glucose and protein on plasma levels of hormone (p. 804).

Mannitol in Renal Failure: In previously fit surgical patients timely use of mannitol may reverse incipient acute renal failure (p. 807). Experimental study of protective effect on kidneys in presence of jaundice (p. 810).

**Diabetic** Retinopathy: Retinal photographs while fluorescein traverses retinal vessels show details of diabetic lesions (p. 811).

Airways Obstruction: Dr. E. J. M. Campbell and colleagues describe a simple test for diffuse airways obstruction (p. 814).

**Drugs for Depression:** Controlled trial of imipramine and "drinamyl" in depressive illness (p. 818).

Monilial Oesophagitis: Two cases with retrosternal dysphagia diagnosed radiologically (p. 821).

Gastrostomy Catheter: Professor A. W. Kay describes a new gastrostomy catheter for both gastric aspiration and duodenal or jejunal feeding (p. 822).

Obstetrics in G.P.: Dr. D. B. Brown writes on "Education of the Pregnant Woman" (p. 823).

**Drugs for Dysentery:** Discussed in "To-day's Drugs" (p. 825).

Pertinax in "Without Prejudice" (p. 833).

Royal Society: New medical fellows (p. 794).

**Adoption:** Letter from Dr. J. G. M. Hamilton on adoption procedure and practice (p. 834).

Vitamin-D Intoxication: Professor C. E. Dent warns of grave hazard of confusing Calciferol Tablets *B.P.* with Calcium and Vitamin-D Tablets *B.P.C.* (p. 834).

**Drug Addiction:** Unidentified hallucinatory drug being peddled (p. 834). See leader p. 792. **Cremation Certificates:** Letter from Dr. C. Allan Birch (p. 841).

General Medical Services Committee: Report of meeting (Supplement, p. 109). New chairman (Supplement, p. 108).

Clinical Meeting: Northampton meeting recognized for Ministry Postgraduate Education Fund (Supplement, p. 108).

**B.M.A. Council Election:** Nominations invited (Supplement, p. 113).

## Suicide Among Doctors

This month and every month a doctor in Great Britain, on the average, will kill himself. Whether the suicide makes headlines or is only a number in the official statistics, the tragedy is felt to be a personal one for family and friends to search their hearts over, not a proper subject for medical inquiry. But once in a while a study disquietingly forces our attention on the high rate of suicide in medical men. The truth may be brought to our notice in suicide statistics, 1-4 in studies of mortality among physicians, 5-7 and sometimes, but not recently, in commentaries on the subject. 8-11

P. H. Blachly, H. T. Osterud, and R. Josslin<sup>1</sup> have reopened the subject in a study of suicide among professional groups in Tulsa, Oklahoma, between 1950 and 1961. They found very high rates for physicians, dentists, and attorneys, and they stress in addition how young most of the doctors were. Seven out of eight were under 50 years old, "destroying themselves at an age when they would be expected to be most socially productive." High figures for suicide among doctors have been reported by other workers in the United States, 2 3 8 9 11 from Denmark, 7 and from Italy.4 In Great Britain too the phenomenon has been noted for at least half a century. Indeed interest in the United States was "incited by a cable dispatch from London announcing a great increase of suicides among physicians in Great Britain" in 1903,8 and the Registrar-General's comprehensive reports on occupational mortality<sup>5</sup> have repeatedly drawn attention to this. Because these reports are based on death certification they underestimate the true extent of suicide, for many cases are not declared as such. Even so, between 1949 and 1953 there were in England and Wales 61 suicides among male doctors aged 25 to 64 and another 13 among older doctors. The rate is two and a quarter times higher than for all males and one and a half times that for males in social class 1, and the suicides were comparatively young men. No rates are given for women doctors, though doctors' wives showed an increase over other women. More than one in every fifty male doctors takes his own life-one out of each year at most medical schools. And 6% of all doctors' deaths under the age of 65 are from suicide—the same as from lung cancer. Why?

The principal reason is certainly the availability of poisonous drugs. The doctor has no need to invent an excuse to get them; he has them at hand, ready when the melancholy comes. For another man the fit may pass before he gets them, but the doctor has only to go to the cupboard. Almost all doctors who kill themselves use drugs—far more than other people who commit suicide. To opportunity must be added his toxicological knowledge. The doctor bent on killing himself is not likely to misjudge the necessary dose.

Opportunity facilitates the act, but other reasons must be canvassed for the will. Most suicides are mentally ill, but there is no evidence either to confirm or to refute the suggestion that doctors suffer an excess of mental illness. It is known, however, that drug addiction is commoner in the medical profession than outside, and though medical addicts are not numerous many of the suicides come from among them. Addiction is an important factor and behind the addiction again lies the factor of opportunity. It has also been suggested that medical men "lack a spiritual conception of life"11 and that they adopt a materialistic outlook towards life.8 9 These notions should not be accepted without evidence, but it is likely that regular acquaintance with death frees some physicians from the popular supernatural dread of it. "The Doctor said that Death was but a scientific fact," lamented Wilde.12

Whether or not they are suffering from formal mental illness most suicides feel depressed when they act, and doctors are no exception. It has been said of them10: "Aside from an exciting cause in opportunity, a high rate of suicide goes with a high degree of unhappiness." Then and subsequently hard and harsh working conditions were incriminated. Blachly and colleagues1 emphasize "individual prestige and frequent rivalry with other persons of the same profession." L. I. Dublin and B. Bunzel<sup>2</sup> refer to "intellectual types who work under some degree of nervous pressure." Earlier writers frequently mentioned economic privation, pointing to the failure of many physicians to make the living to which they had aspired. The Journal of the American Medical Association stated half a century ago8: "The real main factor is, we believe, the business negligence of the profession as a whole. It does not look out for its own interests as it might very properly do without in the least disregarding the interests of the public." These words have a striking topicality. The importance of such factors can easily be overdone but the condition of society known as anomie, which Durkheim<sup>13</sup> associated with high suicide rates, is in many respects paralleled in current opinions about general practice wherein the doctor is experiencing less self-respect together with increasing isolation and withdrawal from the contact and esteem of his professional colleagues. Yet it must remain speculative whether this plays a part, since we do not know whether general practitioners have higher suicide rates than specialists. Among the specialties psychiatry appears to yield a disproportionate number of suicides. The explanation may lie in the choosing of the subject rather than its demands, for some who take up psychiatry probably do so for morbid reasons.

But though such reasons may influence the choice of career within the profession, it is unlikely that they determine the choice of medicine itself. The predisposition to suicide develops later. Availability of drugs must bear the chief blame both in leading to addiction and in facilitating the suicide. Probably this factor accounts by itself for most of the excessive suicide rate (though the rate is high too in some other occupations, such as dentists, lawyers, and retired Army officers). But doctors must have access to drugs. All the same it is proper to reflect on other factors-mental illness

Blachly, P. H., Osterud, H. T., and Josslin, R., New Engl. J. Med., 1963, 268, 1278.
 Dublin, L. I., and Bunzel, B., A Study of Suicide, 1933. New York.
 Powell, E. H., Amer. Soc. Rev., 1958, 23, 131.
 Miner, J. R., Amer. J. Hyg., 1922, Monogr. Series No. 2.
 Registrar-General, Decennial Supplement England and Wales, 1951, Occupational Mortality, Part 2, Vols. I and II, 1958. H.M.S.O., London.

London. 6 Dublin, L. I., and Spiegelman, M., J. Amer. med. Ass., 1947, 134,

1211.

Lindhardt, M., Frandsen, E., Hamtoft, H., and Mosbech, J., Dan. med. Bull., 1963, 10, 59.

J. Amer. med. Ass., 1903, 41, 263.

Med. Surg. Reptr., 1897, 76, 271.

Ibid., 1897, 76, 529.

Knopf, S. A., New York med. J., 1923, 117, 84.

Wilde, O. F. O'F. W., The Ballad of Reading Gaol, 1898.

Durkheim, E., Suicide, 1952. London.

Capstick, A., Brit. med. J., 1960, 1, 1179.

and abnormal personality, dissatisfaction, hardship, and failing self-respect, all of which may perhaps play a contributory part. It is here that our individual actions as physicians and as friends matter. A medical man struggling with drug addiction, for instance, is apt to be rejected and humiliated by his colleagues. From whatever the stricken physician may suffer, doctor's inhumanity to doctor is one burden he might be spared. Premonitory signs of suicide may be present<sup>14</sup> and if recognized may enable the act to be prevented.

## Persistent Pesticides

As the human race continues to multiply at a rapidly increasing rate and to become technically more efficient, so competing species of animals and plants fall away towards extinction. Yet even now man's cry for more food is heard in many parts of the world, and, as Rachel Carson has told us, it could in future echo through a silent countryside. For at least 5,000 years man has been taming nature to his needs and, when he could not tame it, exterminating it. Only recently has a policy of "peaceful coexistence" with wild life been seriously considered, for the revolution in agriculture during the last fifteen years in Great Britain and other technically advanced countries has shown that man is nearly able to exclude from his domestic animals and crops all their untamed relatives. The purification of seed by genetic and other means, the improvements in agricultural machinery allowing cleaner cultivation, and the spraying of crops with insecticides and weed killers have combined to increase yields greatly. One price we have had to pay is the destruction of wild animals and plants that have simply been in the way.

Investigations into how pesticides have been used in practice have revealed a disquieting ignorance of their properties in the field.<sup>2 3</sup> A recent report<sup>4</sup> shows that pesticides toxic to birds are now much more widespread than was formerly known. Many species common in gardens and in aquatic habitats have been found to contain chlorinated hydrocarbons such as D.D.T. in their tissues and apparently to have suffered toxic effects from them. Moreover, according to the same report all bodies of birds of prey analysed so far have contained these substances, which are believed to cause loss of fertility in non-fatal doses. The extinction in these Islands of some species is forecast as possible if nothing is done.

Information on the complex relationships between man and nature is still surprisingly scanty, and many people would agree with the recommendation of the latest report from the Agricultural Research Council's Research Committee on Toxic Chemicals<sup>5</sup> that provision should be made for more research workers. It also draws the Medical Research Council's attention to the need to study the effects of pesticides in the human body, cases of which were reported in the B.M.J. last year. <sup>6</sup> Some of the chlorinated hydrocarbons are exceedingly persistent in nature and are

Carson, Rachel, Silent Spring. London, 1962.

Brit. med. J., 1961, 1, 651.

Ibid., 1961, 2, 1552.

The Risks to Bird Life from Chlorinated Hydrocarbon Pesticides.

Fourth report of the British Trust for Ornithology and the Royal Society for the Projection of Birds. 1964.

Report of the Research Committee on Toxic Chemicals. Agricultural Research Council. London. 1964.

Hunter, C. G., Robinson, J., and Richardson, A., Brit. med. J., 1963, 1, 221.

<sup>&</sup>lt;sup>7</sup> See also ibid., 1963, 1, 205. • The Times, 17 March 1964.